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PATENT

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Eugene Michael Breznock

Appl. No. : 09/938,428

Filed : August 23, 2001

For : Method and Apparatus for  
Trephinating Body Vessels  
and Hollow Organ Walls

Examiner : Paul A. Roberts

) Group Art Unit 3731

) I hereby certify that this correspondence and  
) all marked attachments are being deposited  
) with the United States Postal Service as  
) first-class mail in an envelope addressed to:  
) Commissioner for Patents, P.O. Box 1450,  
) Alexandria, VA 22313-1450, on

) February 23, 2004

) *Karen J. Lenker*) Karen J. Lenker  
) Registration No. 54,618RESPONSE TO RESTRICTION REQUIREMENT DATED JANUARY 30, 2004Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

In response to the Office Communication mailed January 30, 2004, please  
amend the above-identified application as follows:

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IN THE CLAIMS:

Please withdraw Claims 3, 5, 23. Claims 1, 2, 5, 6, 8-13, and 19-22 remain as previously pending.

1. (Previously Amended) An apparatus adapted for cutting holes in a body vessel or hollow organ comprising:

a shaft, wherein the shaft has a longitudinal axis;

a cutting blade;

a controlled force to advance the cutting blade along the longitudinal axis of the shaft; and

an anvil having a surface against which the cutting blade is advanced, wherein the surface of the anvil is perpendicular to the longitudinal axis of the shaft, wherein the anvil is at least as wide as a largest exterior diameter of the cutting blade, and wherein the cutting blade does not pass beyond the surface of the anvil; wherein the cutting blade rotates relative to the anvil while the cutting blade is being advanced toward the anvil.

2. (Original) The apparatus of claim 1 wherein said controlled force on the cutting blade is generated by a spring with a pre-determined or selected spring constant.

3. (Withdrawn) The apparatus of claim 1 wherein said controlled force on the cutting blade is generated by a jackscrew with a knob for manual advance of said cutting blade.

4. (Previously Withdrawn) The apparatus of claim 1 wherein said controlled force on the cutting blade is generated by a hydraulic cylinder and hydraulic pressure supply.

5. (Withdrawn) The apparatus of claim 1 wherein said controlled force on the cutting blade is generated by a jackscrew and an electric motor to advance the blade.

6. (Original) The apparatus of claim 1 wherein said anvil is fabricated from a polymeric material.

7. Cancelled

8. (Original) The apparatus of claim 1 wherein said apparatus comprises a tapered tip or trocar to promote tissue penetration.

9. (Original) The apparatus of claim 8 wherein said tapered tip or trocar includes axially disposed ridges to assist with tissue penetration.

10. (Original) The apparatus of claim 9 wherein said axially disposed ridges are sharp enough to cut tissue.

11. (Original) The apparatus of claim 9 wherein said axially disposed ridges are blunted.

12. (Original) The apparatus of claim 8 wherein said anvil and said tapered tip or trocar are fabricated from the same piece of material.

13. (Previously Amended) A method for creating a hole in a hollow organ or body vessel comprising the steps of:

creating an incision in said hollow organ or body vessel with a sharp object;

advancing a tapered trocar through said hollow organ or body vessel at the incision site until the trocar point has completely penetrated said hollow organ or body vessel;

locating a cutting blade having a longitudinal axis coaxially disposed about said trocar so that said cutting blade is positioned correctly;

advancing said cutting blade into said hollow organ or body vessel under controlled force until said cutting blade fully rests against a blunt surface of an anvil whose outside diameter is greater than or equal to an outer diameter of said cutting blade, wherein the blunt surface of the anvil is perpendicular to the longitudinal axis of the cutting blade, and wherein a leading edge of the cutting blade does not pass beyond the blunt surface of the anvil;

rotating the cutting blade while said cutting blade is being advanced toward said anvil; and

removing said cutting blade and excised tissue from the hollow organ or body vessel.

14-18. (Cancelled)

19. (Previously Presented) A punch adapted for creating holes in a body organ or vessel comprising:

a shaft with a proximal end and a distal end;

a knob affixed at or near the proximal end of the shaft;

an anvil affixed at or near the distal end of the shaft, the anvil having a proximal surface which faces the cutter and a distal surface which faces away from the cutter;

a cutter slidably disposed between said knob and said anvil, wherein the outer diameter of said cutter is less than the outer diameter of said anvil;

a controlled force to bias the cutter toward said anvil; and

a mechanism to rotate said cutter, wherein the cutter rotates relative to the anvil while the cutter is being advanced toward the anvil, wherein the cutter is advanced against, but not beyond, the proximal surface of the anvil.

20. (Previously Presented) The punch of claim 19 further comprising holes in the cutter, wherein said holes vent trapped air.

21. (Previously Presented) The method of claim 13 further comprising the step of providing holes in the cutter to vent air trapped within said cutter.

22. (Previously Presented) The punch of claim 19 wherein the controlled force biases the anvil toward the cutter.

23. (Withdrawn) The punch of claim 22 wherein the controlled force is generated by a jackscrew to move the anvil against the cutter.

24. (Previously Presented) The punch of claim 22 wherein the controlled force is generated by a spring biased to move the anvil against the cutter.

### REMARKS

The foregoing amendments and the following comments are responsive to the restriction requirement set forth by the Examiner in the January 30, 2004 Office Action. The Examiner requests the Applicant to elect one of three patentably distinct species of surgical punches:

1. a spring-based surgical punch
2. a hydraulic-based surgical punch
3. a jack-screw surgical punch

Applicant would like to thank Examiner Roberts for the telephone call extended to Applicant's representative, Karen Lenker, on January 28, 2004. During the telephone call the Examiner stated that a restriction requirement was mailed to the Applicant's representative.

Accordingly, Applicant has elected the spring-based surgical punch species. Reconsideration of the pending claims is therefore respectfully requested.

### RESPONSE TO RESTRICTION REQUIREMENT

Applicant elects the spring-based surgical punch species. Claims 2 and 24 are readable on the spring based surgical punch. The Examiner has identified Claims 1, 13, and 19 as generic claims.

Claims 3-5, and 23 are withdrawn from consideration. It is the Applicant's understanding that if a generic claim is found allowable, the Applicant will be entitled to consideration of the hydraulic-based surgical punch species claims and the jack-screw surgical punch species claims which are written in dependent form or otherwise contain all the limitations of an allowed generic claim.

In addition, Claims 6, 8-12, and 20-22 are not directed to any of the surgical punch species identified by the Examiner. Claim 6 is directed toward the anvil of the surgical punch. Claims 8-12 are directed toward the tapered tip of the surgical punch. Claims 20-22 are directed toward the cutter of the surgical punch. Applicant respectfully requests that Claims 6, 8-12, and 20-22 also be considered.

Thus, Claims 1, 2, 6, 8-13, 19-22, and 24 are pending. Reconsideration of the pending claims is therefore respectfully requested.

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**REQUEST FOR TELEPHONE INTERVIEW**

Pursuant to M.P.E.P. § 713.01, in order to expedite prosecution of this application, Applicant hereby formally requests a telephone interview with the Examiner as soon as the Examiner has considered the effect of the arguments presented above. Applicant's representative may be reached by telephone at (949) 494-3645.

**CONCLUSION**

In view of the forgoing, the present application is believed to be in condition for allowance, and such allowance is respectfully requested. If further issues remain to be resolved, the Examiner is cordially invited to contact the undersigned such that any remaining issues may be promptly resolved.

Respectfully submitted,

Dated: February 23, 2004 By: Karen J. Lenker  
Karen J. Lenker  
Registration Number 54,618  
408 Panorama Drive  
Laguna Beach, CA 92651  
(949) 494-3645